

Instructions for use for

Root canal posts with cylindro-conical shape

The use and periodic maintenance of root canal posts must be carried out exclusively by skilled persons.
Only original tools and parts may be used for this work.

Upon publication, these instructions for use supersede all previous editions.

The manufacturer is not liable for any damages due to the user disregarding the instructions for use below.

Intended use

Root canal posts manufactured by Cendres+Métaux SA are inserted into tooth roots with large-scale deterioration of the dental crown. They are intended for stabilizing tooth roots and for providing retention for root caps, abutments or post crowns in the context of endodontic treatment. The root canal posts are posts and provide retention of abutments fabricated in the mouth.

General information

Traceability of the batch numbers

The batch numbers of all parts used must be documented to ensure traceability.

Sterilization

The root canal posts, cutting drills and auxiliary instruments are supplied non-sterile.
All metal components must be sterilized and cleaned prior to use. Sterilization is performed as steam sterilization at 134 °C, duration: 18 min. (see Care and maintenance surgical and prosthetic instruments www.cmsa.ch/dental)

Disinfection

After any fabrication or modification, the prosthetic work, including the matrix components, must be cleaned and disinfected according to national guidelines.

When choosing the disinfectant, ensure that:

- It is suitable for cleaning and disinfection of dental prosthetic components.
- It is compatible with the materials of the products to be cleaned and disinfected.
- It has proven efficacy in disinfection.

All parts made of plastic must be disinfected with a high EPA-registered disinfectant prior to use.

Recommended: Cidex® OPA Solution. Strictly follow the manufacturer's instructions.

Warnings

This product may not be used in patients with allergies to one or more elements of the materials. In patients with suspected allergy to one or more elements of the materials, this product may only be used following allergological clarification and proof of non-existence of an allergy.

For further information, please contact your Cendres+Métaux representative.

The drilling depth must be determined from the X-ray image.

Auxiliary instruments may contain nickel (see Labeling on packaging).

The product was not tested / evaluated in an MRT environment with regard to overheating and movement.



MP-Post (X)



MP-Post Retentive (K)



MP-Post Standard (K)

Rx only

The products carry the CE Mark.
See packaging for details.

These instructions for use are not sufficient for immediate use of the root canal posts. Dental or laboratory knowledge is required, as well as an introduction to handling the Cendres+Métaux root canal posts by an experienced person. Courses and training are regularly offered by Cendres+Métaux. Only original tools and parts may be used for this work.

If the root canal post breaks, an endo safety system can be used to carefully remove the fragment.

Preventive measures

The components are supplied non-sterile. Proper preparation of the components prior to use in the patient is described in the «Sterilization» and «Disinfection» chapters.

For intraoral use, all products must be generally secured against aspiration.

No cutting work may be carried out in the patient's mouth.

Further hints

for processing are available in the Dental documentation of Cendres+Métaux and in the Internet by visiting www.cmsa.ch/dental.

Specification

Cylindro-conical shape

Advice

The MP-Post system is not compatible with the root canal post systems CM and Mooser.

Application

Burnout plastic

Economical alternative to prefabricated precious metal posts

Steel

Temporary work (30 days)

Indication

Root caps for partial and hybrid dentures, post crowns, cast cores and temporary work (Root canal posts X = steel max. 30 days).

Contraindication

If a snug fit root canal preparation is not possible in the case of a very large root canal.

Periodontitis, severe gum disease, poor oral hygiene, caries and marginal inter-occlusal space.

Steel posts, definitive work.

Material

Materials

Post retentive and standard	Burn-out plastic
Post	X steel

K = Korak, burn-out plastic

X = Steel, not suitable for casting
Contains nickel

Care and maintenance

All components are supplied **non-sterile** to the customer.

Therefore, all products need to be disinfected. Surgical instruments must be sterilized prior to use. Adhere strictly to the manufacturer's instructions for the use of disinfectants (duration of application and concentration).

Sterilization is performed as steam sterilization at 134 °C, duration: 18 min. (EN 13060).

Reusable surgical instruments must be disinfected immediately after use and then cleaned to remove any deposits (use a nylon brush if necessary). Thoroughly rinse the instruments with water, place in an autoclave bag or surgical cassette and sterilize according to the above parameters.

Not recommended for stainless steel: Chloric disinfectants or cleaning agents or agents contaminated with chlorine (e.g. by physiological saline solution), disinfectants or cleaning agents containing oxalic acid.

Important information

The MP-Post is part of a system and must only be used with the corresponding original parts and instruments according to the recommendations of the manufacturer. Otherwise, any responsibility by the manufacturer will be declined. Do not clean any cutting instruments in the ultrasonic cleaner as this could blunt the instruments. Avoid high pressures, tilting or leverage in order to prevent danger of instrument fracture.

Observe that cutting instruments should be used maximum 10 times only.

Safety measures

To prevent swallowing or aspiration, several precautions must be taken e.g. rubber dam, instruments secured by dental floss. Protect your eyes by wearing protective glasses.

Instructions for use**1. Initial preparation**

The root canal must firstly be endodontically treated. The root preparation then follows according to the clinical situation, with a removable root filling material, for example gutta percha.

2. Selection of the post

Size selection is based on the X-ray, the anatomy and the post hole canal situation (length and diameter).

3. Preparation of the root canal

Penetrate the root filling material to the desired depth with a hot instrument or a small Peeso reamer running at moderate speed. Enlarge the canal to the desired dimension using the MP root canal drill (Order No. 200004436). The correct depth for every reamer size is marked by a notch on the reamer. Always start with the smallest and go to the next. Do not jump sizes, the reamer may exert too much torque on the root, get stuck or break.

Example:**MP-Post yellow**

use MP root canal drill yellow (Order No. 20000441)

MP-Post green

start with MP root canal drill yellow (Order No. 20000441)
go to the MP root canal drill red (Order No. 20000447)
go to the MP root canal drill blue (Order No. 200004451)
finish with MP root canal drill green (Order No. 200004455)

Start with the smallest enlarger and increase size by size. Failure to do so may exert too much torque on the root or cause the enlarger to shear or become jammed.

Combustible plastic roots**4. Take the impression and modelling**

Take the impression in your chosen material. The retentive MP-Post will be held securely in the impression. Make the laboratory model. Make the casting object as usual.

5. Casting process

The cast alloy must have mechanical properties, especially 0.2%-proof stress and $R_p 0.2\% \text{ N/mm}^2$ or more (measured according to ISO 1562). It should be noted that a biocompatible alloy must be selected.

The sprues must be arranged such that elimination of the wax and plastic, as well as flow of the liquid alloy into the form of the casting object is optimized (avoid acute angles and sharp corners). Use of aggressive surfactants, which could damage the shape of the root canal post, should be avoided. The use of high-strength, shock-resistant, phosphate-bonded investment material (e.g. Ceramicor) has its advantages.

Preheating the cast cylinder for the Ceramicor investment material. Pay attention to slow temperature rise. With the opening down, place the cast cylinder in the furnace (facilitates the flow and elimination of the wax and plastic). Maintain at 250–300°C until the entire model is eliminated. Maintain this temperature as long as possible (30–45 min.).

Set the furnace to 850°C and turn the cast cylinder at 600°C with the opening up (degassing). Maintain at the preheating temperature until the sprues are of the same color as the furnace muffle.

Perform the cast according to the specifications of the alloy manufacturer.

Slowly cool to room temperature. Should casting defects such as bubbles or a lack of precision on one edge occur, the cast can be reworked provided this does not affect the precision and original dimensions. When using another investment material, observe the manufacturer's instructions for use.

6. Cementing

Fill the root canal with cement by means of a lentulo (strictly observe the instructions for use issued by the cement manufacturer). Ensure that the post is situated in its final position.

Steel post

7. Place the steel post temporary into the canal. Build the temporary crown on the post and tooth. Remove the temporary crown and post and fix it with temporary cement to the tooth.

Cleaning and care

It is best to clean your teeth and your dentures after every meal. For further information, please contact your Cendres+Métaux representative.

The issuing of these instructions for use renders all previous versions invalid.

The manufacturer rejects any liability for damages resulting from non-compliance with these instructions for use.

Only original tools and parts may be used for this work.

In case of complaints, please always include the batch number.

Labeling on packaging / symbols



Date of manufacture



Manufacturer



Catalogue number



Batch code



Quantity



Consult instructions for use

Rx only

Attention: According to US federal law, this product may only be sold by or on behalf of a physician.



Cendres+Métaux SA products with CE labeling meet the requirements of the Medical Device Directive 93/42/EEC.



Do not re-use



Non-sterile



Keep away from sunlight



Attention (observe accompanying documents)